

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
31 July 2003 (31.07.2003)

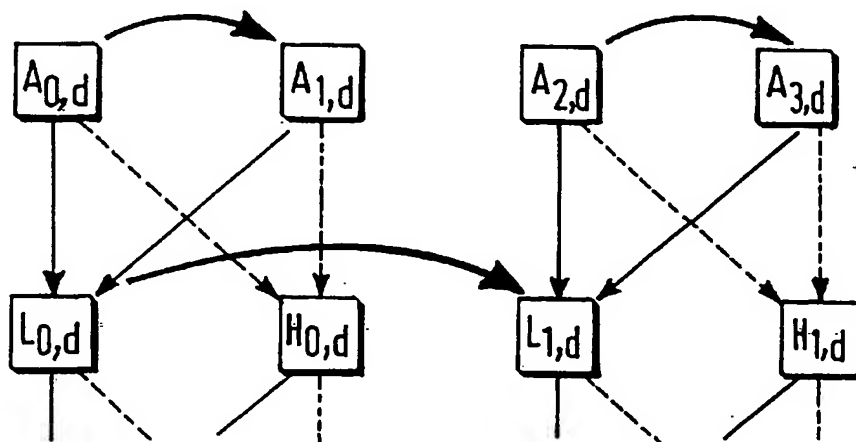
PCT

(10) International Publication Number
WO 03/063497 A1

- (51) International Patent Classification⁷: H04N 7/26 (74) Agent: LANDOUSY, Christian: Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (21) International Application Number: PCT/IB03/00156
- (22) International Filing Date: 20 January 2003 (20.01.2003) (81) Designated States (*national*): AF, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 02290155.7 22 January 2002 (22.01.2002) EP
- (71) Applicant (*for all designated States except US*): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): BOURGE, Arnaud [FR/NL]; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). BARRAU, Eric [FR/NL]; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- Published:
with international search report

[Continued on next page]

(54) Title: DRIFT-FREE VIDEO ENCODING AND DECODING METHOD, AND CORRESPONDING DEVICES



(57) Abstract: The invention relates to a video encoding method for the compression of a video sequence, comprising the steps of generating from the original video sequence, by means of a wavelet decomposition, a low resolution sequence, performing on said low resolution sequence a low resolution decomposition, by means of a motion compensated spatio-temporal analysis, generating from said low resolution decomposition a full resolution sequence, by means of an anchoring of the high frequency spatial subbands resulting from the wavelet decomposition to said low resolution decomposition and coding said full resolution sequence and the motion vectors generated during the motion compensated spatio-temporal analysis. The invention also relates to a corresponding decoding method, and to corresponding encoding and decoding devices.

WO 03/063497 A1